

1998 Toxics Release Inventory

MINNESOTA

Reported Releases and Waste Management Activities (in pounds)

	Original Industries	New Industries	Total
On-site Releases	17,004,641	11,889,243	28,893,884
Air Emissions	15,904,943	1,773,087	17,678,030
Surface Water Discharges	812,176	18,641	830,817
Underground Injection Class I Wells	0	0	0
Underground Injection Class II-V Wells	0	0	0
On-site Land Releases to RCRA Subtitle C Landfills	1,069	0	1,069
Other On-site Land Releases	286,453	10,097,515	10,383,968
Off-site Releases (Transfers Off-site to Disposal)*	2,375,503	1,106,939	3,482,442
Total On- and Off-site Releases	19,380,144	12,996,182	32,376,326
Recycled On-site	187,351,415	4,031,921	191,383,336
Recycled Off-site	21,940,758	1,162,699	23,103,457
Energy Recovery On-site	7,034,602	0	7,034,602
Energy Recovery Off-site	2,191,446	105,123	2,296,569
Treated On-site	36,106,015	1,539,758	37,645,773
Treated Off-site**	10,716,446	13,323	10,729,769
Quantity Released On- and Off-site ***	20,096,775	12,945,025	33,041,800
Total Production-related Waste Managed	285,437,457	19,797,849	305,235,306
Total Non-production-related Waste Managed	19,320	251	19,571

Transfers Off-site for Further Waste Management/Disposal

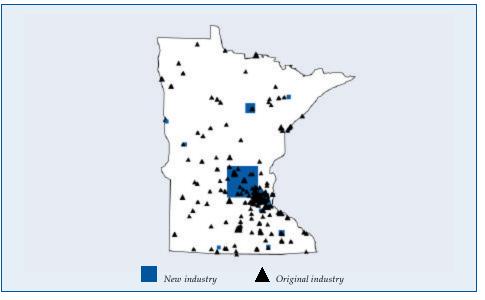
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Recycling	21,932,542	1,162,905	23,095,447
Energy Recovery	2,197,041	105,133	2,302,174
Treatment	1,245,251	1,197	1,246,448
Publicly Owned Treatment Works (POTWs)	9,635,673	15,027	9,650,700
Metals and Metal Compounds*	134,379	2,550	136,929
Non-metal TRI Chemicals**	9,501,294	12,477	9,513,771
Other Off-site Transfers****	0	0	0
Off-site Transfers to Disposal not including metals to POTWs)	2,731,634	1,104,389	3,836,023
Total Transfers Off-site for Further Waste Management/Disposal	37,742,141	2,388,651	40,130,792

- * Transfers to POTWs of metals and metal compounds are included in off-site releases. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.
- ** Transfers to POTWs of non-metals are included in treated off-site waste management activity.
- *** Excludes non-production-related releases; e.g. releases due to catastrophic events or remedial actions.
- ****Transfers reported without a valid waste management code.

For More Information . . .

State Contact: Steve Tomlyanovich (651) 282-5396 Fax: (651) 296-0459 EPA Regional Contact: Thelma Codina (312) 886-6219 Fax: (312) 353-4788 To obtain TRI data use assistance, call TRI User Support Service (TRI-US): (202) 260-1531

Fax: (202) 401-2347



The largest marker in the state map represents the largest facility for on-site releases in the state of Minnesota. All markers are proportionally-sized to represent the on-site releases at each facility within this state.

State/TRI Data†

Population	4,725,419
Square Miles	79,617
Total Facilities	496
Total Forms	1,482
Form As	 308

FOIIII AS			300
	Original Industries	New Industries	Total
National Rank for Total On- and	l Off-site Releases*		
Rank	34	36	36
Pounds	19,380,144	12,996,182	32,376,326
National Rank for Total On-site	Releases**		
Rank	33	35	36
Pounds	17,004,641	11,889,243	28,893,884
National Rank for Total Release	s within State***		
Rank	34	36	36
Pounds	18,085,510	13,171,883	31,257,393
National Rank for Production-re	elated Waste Managed		
Rank	26	35	30
Pounds	285,437,457	19,797,849	305,235,306

- Includes transfers out-of-state for disposal. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.
- ** Includes amounts released at the facility. Excludes amounts transferred to other sites.
- *** Excludes transfers for disposal sent out-of-state or sent to other TRI facilities within the state reporting that amount released on-site.

[†]One facility, reporting 1.3 million pounds released on-site and total production-related waste managed, was incorrectly located in this state. Removal of this facility changes the national rank for total on-site releases for new industries from 35 to 37, for total releases within the state for total industries from 36 to 37, and for production-related waste managed for new industries from 35 to 38.

1998 Toxics Release Inventory

MINNESOTA

On-site and Off-site Releases for Top Ten Chemicals Ranked on Total Releases in the State (Original Industries)

			On-Site I	Releases		Off-site Releases		Off-s	site Transfers to Disp	osal
			Surface		On-site	Transfers	Total	Transferred	Transferred	Transferred
		Air	Water	Underground	Releases to	Off-Site to	Releases in	Into	Within	Out of
CAS		Emissions	Discharges	Injection	Land	Disposal*	the State**	State	State	State
Number	Chemical	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
1330-20-7	Xylene (mixed isomers)	1,953,526	197	0	398	21,292	1,975,413	42,701	16,222	5,070
110-54-3	n-Hexane	1,962,581	5	0	250	1,134	1,963,970	0	1,040	94
108-88-3	Toluene	1,945,295	206	0	0	11,566	1,957,067	12,486	10,947	619
100-42-5	Styrene	1,645,322	5	0	0	21,431	1,666,758	11	16,347	5,084
67-56-1	Methanol	1,489,787	12,057	0	2,500	4,236	1,508,580	15,351	4,236	0
7664-41-7	Ammonia	1,166,787	85,985	0	44,959	49,193	1,346,924	22	49,193	0
78-93-3	Methyl ethyl ketone	872,913	199	0	0	4,792	877,904	42,813	4,366	426
_	Glycol ethers	817,598	862	0	0	687	819,147	2,399	224	463
71-36-3	n-Butyl alcohol	702,795	0	0	0	0	702,795	220	0	0
	Zinc compounds	28,147	4,846	0	17,000	615,971	665,964	9,070	61,260	554,713

^{*} Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

On-site and Off-site Releases for Top Ten Chemicals Ranked on Total Releases in the State (Seven New Industries)

			On-Site F	Releases		Off-site Releases		Off-s	ite Transfers to Disp	osal
			Surface		On-site	Transfers	Total	Transferred	Transferred	Transferred
		Air	Water	Underground	Releases to	Off-Site to	Releases in	Into	Within	Out of
CAS		Emissions	Discharges	Injection	Land	Disposal*	the State**	State	State	State
Number	Chemical	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
_	Barium compounds	59,313	7,455	0	7,559,285	992,840	8,618,893	150,000	992,820	20
_	Manganese compounds	9,430	8,200	0	1,219,915	23,370	1,260,915	19,000	23,360	10
7647-01-0	Hydrochloric acid	699,030	0	0	0	0	699,030	0	0	0
7664-39-3	Hydrogen fluoride	579,030	0	0	0	0	579,030	0	0	0
_	Zinc compounds	5,037	1,075	0	495,015	2,475	503,602	303	2,470	5
_	Copper compounds	5,840	1,175	0	334,020	1,425	342,460	1,300	1,420	5
7664-93-9	Sulfuric acid	224,265	0	0	0	0	224,265	0	0	0
_	Lead compounds	2,360	0	0	206,010	32	208,402	11	10	22
_	Nickel compounds	11,640	431	0	88,275	79,795	180,141	620	79,795	0
7664-41-7	Ammonia	147,099	0	0	5	0	147,104	0	0	0

Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

^{**} The chemical ranking is based on the amounts in this column.

^{**} The chemical ranking is based on the amounts in this column.

On- and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (Original Industries)

								Off-site I	Releases
				(Transfers Off-s	ite to Disposal)				
			Undergroui	nd Injection	On-site Rel	eases to Land			
		Surface			RCRA	Other	Total		
	Air	Water	Class I	Class II-V	Subtitle C	On-site Land	On-site	Transferred	Transferred
	Emissions	Discharges	Wells	Wells	Landfills	Releases	Releases*	Within State	Out of State
Facility, City, County	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Koch Refining Co. L.P., Rosemount, Dakota	456,459	616,531	0	0	0	49	1,073,039	32,724	34
Ford Motor Co. — Twin Cities Assembly Plant, Saint Paul, Ramsey	854,652	0	0	0	0	0	854,652	1,095	13,131
Cenex Harvest States Oilseed Processing & Refining, Mankato, Blue Earth	733,000	0	0	0	250	0	733,250	0	0
Boise Cascade Corp., International Falls, Koochiching	506,568	50,260	0	0	0	44,523	601,351	0	0
3M, Cottage Grove Center, Cottage Grove, Washington	490,648	56,145	0	0	0	0	546,793	4,865	267,139
3M Hutchinson, Hutchinson, Mc Leod	541,365	0	0	0	0	0	541,365	22,930	7,080
Crystal Cabinet Works Inc., Princeton, Sherburne	515,272	0	0	0	0	0	515,272	0	0
3M, Saint Paul, Ramsey	453,689	0	0	0	0	0	453,689	5,464	0
Frigidaire Home Prods. — Freezer, Saint Cloud, Stearns	378,044	0	0	0	0	0	378,044	33,000	0
American Crystal Sugar Co., East Grand Forks, Polk	343,250	24,000	0	0	0	0	367,250	0	0

^{*}The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

On- and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (Seven New Industries)[†]

								Off-site R	eleases
				(Transfers Off-si	Off-site to Disposal)				
			Undergroun	nd Injection	On-site Rel	eases to Land			
		Surface			RCRA	Other	Total		
	Air	Water	Class I	Class II-V	Subtitle C	On-site Land	On-site	Transferred	Transferred
	Emissions	Discharges	Wells	Wells	Landfills	Releases	Releases*	Within State	Out of State
Facility, City, County	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Northern States Power Co., Becker, Sherburne	121,446	470	0	0	0	7,367,685	7,489,601	610	17
Boswell Energy Center, Cohasset, Itasca	124,200	11,190	0	0	0	1,600,025	1,735,415	50	25
Rochester Public Utilities Silver Lake Plant, Rochester, Olmsted	512,000	0	0	0	0	0	512,000	5,470	0
Austin Utilities Northeast Power Station, Austin, Mower	149,800	15	0	0	0	0	149,815	12,200	0
Laskin Energy Center, Hoyt Lakes, St Louis	2,105	4,000	0	0	0	130,005	136,110	10	0
LSP — Cottage Grove L.P., Cottage Grove, Washington	120,005	0	0	0	0	0	120,005	0	0
Otter Tail Power Co., Hoot Lake Plant, Fergus Falls, Otter Tail	14,402	0	0	0	0	100,000	114,402	1,700	0
A.S. King Generating Plant, Bayport, Washington	89,211	1,580	0	0	0	15	90,806	547,020	5
High Bridge Generating Plant, Saint Paul, Ramsey	31,315	0	0	0	0	52,000	83,315	100,260	5
Black Dog Generating Plant, Burnsville, Dakota	32,715	30	0	0	0	30,005	62,750	121,215	5

^{*}The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

^{*}One facility was incorrectly located in this state. It ranked third with total on-site releases of 1,311,745 pounds. It is instead located in Iowa and has been removed from this list.

MINNESOTA

Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (Original Industries)

Facility, City, County	Recycled On-site Pounds	Recycled Off-site Pounds	Energy Recovery On-site Pounds	Energy Recovery Off-site Pounds	Treated On-site Pounds	Treated Off-site Pounds	Quantity Released On- and Off-site* Pounds	Total Production- related Waste Managed Pounds	Total Non- Production- related Waste Managed Pounds
North Star Recycling, Saint Paul, Ramsey	0	0	0	0	0	0	1,241,207	1,241,207	0
Koch Refining Co. L.P., Rosemount, Dakota	164,650	99,532	0	0	1,283,150	348	1,105,721	2,653,401	2,999
Ford Motor Co. — Twin Cities Assembly Plant, Saint Paul, Ramsey	0	874,096	0	0	428,900	15,900	866,379	2,185,275	0
3M, Cottage Grove Center, Cottage Grove, Washington	0	1,101,552	1,291,640	454,480	15,203,124	145,049	845,805	19,041,650	8
Cenex Harvest States Oilseed Processing & Refining, Mankato, Blue Earth	0	17,000	0	0	16,200	600	730,000	763,800	0
Boise Cascade Corp., International Falls, Koochiching	0	0	3,040,000	0	4,658,000	0	602,410	8,300,410	0
3M Hutchinson, Hutchinson, Mc Leod	20,471,000	1,100,000	0	59,390	3,193,000	406,900	579,836	25,810,126	0
Crystal Cabinet Works Inc., Princeton, Sherburne	0	163,123	0	0	0	0	515,312	678,435	0
3M, Saint Paul, Ramsey	0	24,200	228,648	18,359	2,308,829	130,163	459,153	3,169,352	0
Frigidaire Home Prods. — Freezer, Saint Cloud, Stearns	0	36,000	0	0	0	3,500	411,035	450,535	0

^{*}The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.

Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (Seven New Industries)[†]

	Recycled On-site	Recycled Off-site	Energy Recovery On-site	Energy Recovery Off-site	Treated On-site	Treated Off-site	Quantity Released On- and Off-site*	Total Production- related Waste Managed	Total Non- Production- related Waste Managed
Facility, City, County	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Northern States Power Co., Becker, Sherburne	0	0	0	0	589,100	0	7,453,651	8,042,751	0
Boswell Energy Center, Cohasset, Itasca	0	0	0	0	122,000	0	1,727,000	1,849,000	0
A.S. King Generating Plant, Bayport, Washington	0	0	0	0	83,000	0	635,300	718,300	0
Rochester Public Utilities Silver Lake Plant, Rochester, Olmsted	0	0	0	0	0	0	513,100	513,100	0
Riverside Generating Plant, Minneapolis, Hennepin	0	0	0	0	81,000	0	376,000	457,000	0
Black Dog Generating Plant, Burnsville, Dakota	0	0	0	0	50,000	0	181,200	231,200	0
High Bridge Generating Plant, Saint Paul, Ramsey	0	0	0	0	49,000	0	178,800	227,800	0
Austin Utilities Northeast Power Station, Austin, Mower	0	0	0	0	128,000	0	161,800	289,800	0
Laskin Energy Center, Hoyt Lakes, St Louis	0	0	0	0	0	0	140,000	140,000	0
LSP — Cottage Grove L.P., Cottage Grove, Washington	0	0	0	0	0	0	120,000	120,000	0

^{*}The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.

*One facility was incorrectly located in this state. It ranked third with quantity released on- and off-site of 1,318,000 pounds. It is instead located in lowa and has been removed from this list.